

Amendments to the Claims:

1. (Currently Amended) A method of facilitating communications at a proxy in a network comprising:

receiving a message from a mobile unit having a contact address;

intercepting and identifying at the proxy at least one signaling message for the mobile unit that includes the contact address for a session directed to the mobile unit;

compressing the at least one signaling message that includes the contact alias address;

routing the compressed at least one signaling message to the mobile unit with the contact address;

intercepting and ~~intercepting~~ identifying at the proxy at least one later signaling message ~~for to~~ the mobile unit;

~~not sending a second message corresponding to the at least one later message to the mobile unit;~~

~~generating a response message in response to receiving the at least one later message, and~~

~~sending the response message to a server~~

determining whether there is a need to route a message corresponding to the at least one later message to the mobile unit;

when it is determined that there is the need to route the message corresponding to the at least one later message:

compressing the at least one later signaling message to the mobile unit,

and

routing the compressed at least one later signaling message to the mobile

unit;

when it is determined that there is not the need to route the message corresponding to the at least one later message:

not routing a second message corresponding to the at least one later

signaling message to the mobile unit, and

responding to the at least one later signaling message.

2. (Currently Amended) The method of claim 1 further comprising:
establishing a contact alias associated with the mobile unit and the contact address, the contact alias substantially containing the contact address and wherein the intercepting and identifying at the proxy at least one later signaling message for the mobile unit further comprises identifying the at least one later signaling message for the session directed to the mobile unit using the contact alias.

3. (Original) The method of claim 1 wherein the message from the mobile unit is one of a SIP REGISTER message, a SIP INVITE message; a SIP OK message; a SIP OPTIONS message; and a SIP BYE message.

4. (Currently Amended) The method of claim 1 further comprising decompressing a signaling message received from the mobile unit and forwarding the decompressed signaling message to [[a]] the server.

5. (Original) The method of claim 1 wherein receiving the message from the mobile unit having a contact address, comprises receiving a registration message that includes an indication that the mobile unit processes compressed messages.

6. (Original) The method of claim 1 wherein receiving the message from the mobile unit having a contact address, includes receiving a capabilities header indicating an ability to process compressed messages.

7. (Currently Amended) The method of claim 1 further comprising advertising the presence of [[a]] the proxy for signaling message compression to the mobile unit.

8. (Currently Amended) The method of claim 1 wherein the step of intercepting and identifying at the proxy at least one signaling message that includes the

contact address for a session for the mobile unit includes intercepting and identifying a SIP message.

9. (Currently Amended) A method of compressing communications at a proxy for SIP message compression, the method comprising:

receiving a message with a contact address from ~~the~~ a mobile unit having the contact address;

intercepting and identifying at the proxy at least one SIP message from a server that includes the contact address, the at least one SIP message directed to the mobile unit;

compressing the at least one SIP message that includes the contact address at the proxy to obtain at least one corresponding compressed message;

routing the at least one corresponding compressed message to the mobile unit;

intercepting and identifying at the proxy at least one later SIP message from [[a]] the server, the at least one later SIP message directed to the mobile unit;

determining that there is not need to route a message corresponding to the at least one later SIP message to the mobile unit;

generating an SIP response message for the at least one later SIP message; and

sending the SIP response message to the server

when determining that there is the no need to route the message corresponding to the at least one later SIP message to the mobile unit;

generating a SIP response message for the at least one later SIP message

and

sending the SIP response message to the server, and

when determining that there is the need to route the message corresponding to the at least one later SIP message to the mobile unit;

compressing the at least one later SIP message to obtain at least one later corresponding compressed message and

routing the at least one later corresponding compressed message to the mobile unit.

10. (Previously Presented) The method of claim 9 further comprising:

establishing a contact alias associated with the mobile unit and the contact address, the contact alias substantially containing the contact address, and wherein the intercepting and identifying the at least one SIP message that includes the contact address comprises intercepting the at least one SIP message on the contact alias.

11. (Currently Amended) The method of claim 9 wherein the message with the contact address from the mobile unit is one of a SIP REGISTER message; a SIP INVITE message; a SIP OK message; a SIP BYE message; and a SIP OPTIONS message.

12. (Previously Presented) The method of claim 9 further comprising decompressing a SIP message received from the mobile unit and forwarding the decompressed SIP message to the server.

13. (Currently Amended) The method of claim 9 wherein the message with the contact address from the mobile unit includes an indication that the mobile unit processes compressed messages.

14. (Original) The method of claim 9 further comprising advertising the presence of the proxy for SIP message compression to the mobile unit.

15. (Previously Presented) The method of claim 9 further comprising receiving authentication information from the mobile unit to facilitate authentication of the mobile unit.

16. (Previously Presented) The method of claim 9 wherein the at least one compressed message is a legacy cellular call setup message.

17. (Currently Amended) A device for facilitating communications in a network with a mobile unit having a contact address comprising:

a SIP register storing a first SIP message, the first SIP message identifiable as being destined for the contact address of the mobile unit; and

a controller coupled to the SIP register and having an output, the controller compressing the first SIP message in the SIP register and placing the compressed first SIP message on the output for transmitting the compressed first SIP message to the mobile unit wherein the controller being programmed for receiving a second SIP message in the SIP register, determining ~~that~~ whether there is a need to send a message to the mobile unit corresponding to the second SIP message, for when there is no need to send a message to the mobile unit corresponding to the second SIP message, generating a SIP response message to the second SIP message on behalf of the mobile unit and placing the SIP response message on the output for transmitting the compressed message to a server and for when there is a need to send the message to the mobile unit corresponding to the second SIP message, compressing the second SIP message in the SIP register and placing the compressed second SIP message on the output for transmitting the compressed second SIP message to the mobile unit.

18. (Currently Amended) The apparatus of claim 17 wherein the compressed first SIP message is a legacy cellular call setup message.

19. (Previously Presented) The apparatus of claim 17 wherein the second SIP message is an authentication request.

20. (Previously Presented) The apparatus of claim 17 further comprising an alias register storing a contact alias associated with the contact address of the mobile unit and wherein the controller comprises means for determining and forming the contact alias in the alias register.

21. (Original) The apparatus of claim 20 wherein the controller forms the contact alias such that it contains the contact address information.

22. (Currently Amended) The apparatus of claim 18 wherein the controller comprises means for compressing and routing the second SIP messages message to the mobile unit upon a determination that the second SIP message is directed to a contact alias.